



#### **ABOUT THE MINIPORT-30**

The Furman MINIPORT-30 Power Relay is a 30 amp, contact or switched 120 VAC outlet, with a terminal strip that allows remote control via safe, inexpensive, low voltage Class 2 wiring.

The MINIPORT-30 (NRTLC pending) provides a twist lock inlet and outlet, and is housed in a heavy duty steel, 8" x 8" x 4" junction box.

Like all Furman MINIPORTS, this model includes an internal 12 VDC supply, and can be controlled from a remote location by using the Furman PowerLink Remote AC Power Sequence Controller, the ASD-120 Sequenced Power Distro, or for simpler jobs, the Furman RS-1 or RS-2 Remote System Control panels. The RS-1 provides a maintained key switch; the RS-2 has a momentary switch. (Please see the Furman data sheet "Remote Control Products" for more detailed information.)

Multiple MINIPORTs may have their control wiring paralleled so that all are controlled by a single switch closure, and may be linked so that all turn on simultaneously or one by one, in a delayed sequence. (Turning-off always occurs simultaneously.) This is further explained in "Linking Multiple Units," on overleaf.

### MOMENTARY VS. MAINTAINED CONTACT SWITCHING

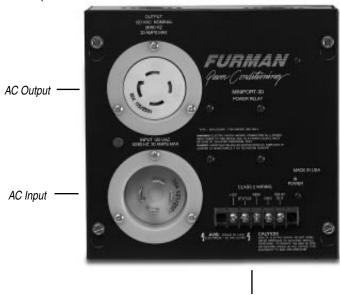
An on-off switch of either kind may be used to actuate the MiniPort-30. Maintained switches, such as most toggle switches, push-on/push-off button switches stay open until the switch is engaged, and stay closed until the switch is disengaged. Momentary switches, usually push-button types, are normally open and stay closed only as long as the button is pressed.

Maintained switches are most convenient when there is only one remote switch location; momentary switches allow turn-on or turn-off from multiple locations.

MiniPorts come factory-configured for maintained operation. They may be easily converted to momentary operation by moving a jumper on the MiniPort's circuit board. To do this, first disconnect the unit from AC power. Remove the four screws that secure the cover. On the circuit board, there are two pairs of terminals, one labeled "MAINTAINED" and the other "MOMENTARY." There is a small black jumper linking the MAINTAINED terminals. Slide it up and off, and replace it securely over the MOMENTARY terminals. Reattach the cover.

#### MAINTAINED MODE

In the simplest configuration, to control a single MiniPort from a single remote location,



Terminal Strip

connect a maintained-action SPST switch to the REM and +12V terminals. The Furman RS-1 Remote System Control Panel is an attractively finished key switch designed for use in single-gang wall mount boxes. It can control, from one location, most Furman power products that have remote capability. Power will be available at the MiniPort-30's AC outlet when the switch is open, and will be removed when it is closed. If the cable run is greater than 150 feet, we recommend that the REM wire be tied to ground during ON operation rather than leaving it floating, using a SPDT switch as shown in the Wiring Diagram on the back of this page. (The RS-1 provides for the use of a ground wire, if desired.)

#### **MOMENTARY MODE**

In Momentary Mode, the MiniPort-30 has "memory"- it needs only a momentary signal on the remote terminal to change its state from OFF to ON, or ON to OFF.

When first plugged in (or after power is lost and reapplied for any reason) the memory state is OFF, meaning that no power will be available at the outlet. It will stay OFF until turned ON by a momentary connection of the REM terminal to +12V. It will then stay ON until turned OFF by a second momentary connection. The ON or OFF state begins on the rising edge of the signal.

The Furman RS-2 Remote System Control Panel is ideal for installations requiring multiple remote switches. The RS-2 is identical to the RS-1 in most respects, but with a momentary function rater than a maintained.

#### IMPORTANT NOTE REGARDING MOMENTARY MODE:

If multiple MiniPorts are being controlled in Momentary Mode, power loss to any one of the units will likely cause its memory to be different than that of the other units. Not only will this be irritating, it can also be dangerous, as it may be ON when the others are OFF. To correct this potential problem (as exists in any simple momentary switch product), our thoughtful engineers devised a simple method of holding the switch down (REM to +12) for at least four seconds. This resets all units to the OFF condition, and avoids having to disconnect AC power from all units.

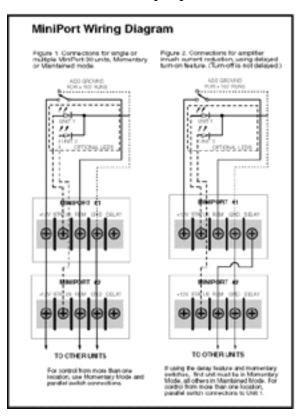
#### **LINKING MULTIPLE UNITS**

Multiple MiniPorts may be connected together so that all are controlled by a single switch closure. All the units must be set to the same mode depending on the type of switch or switches to be used (use momentary mode and momentary switches if more than one switch is required.) All the units must be paralleled by tying together all the +12V terminals (see Wiring Diagram, below).

Multiple MiniPorts may be linked so that they all turn on simultaneously, as discussed above, only the turn-ons are delayed (all turn-offs occur simultaneously.) This feature is particularly

useful in staggering the turn-on of large power amps to avoid large inrush currents that might trip the house circuit breakers. The delay interval is approximately two to three seconds (the first unit turns on with the switch closure, the second in the chain about 3 seconds later, the third unit 3 seconds after the second, etc.)

The choice of delayed or simultaneous linking is available regardless of whether maintained or momentary switching is used. However, if delayed linking is used with momentary switching, only the first MiniPort should be connected in parallel between the first unit's +12V and REM terminals. The second and subsequent MiniPorts must be left in maintained mode. See Wiring Diagram.



With the addition of a
Furman PS-REL AC Relay
to provide control, a MiniPort
can be used to extend
the capacity of any other
product that has a switched
outlet, such as a receiver/
amp that is then controlled
with a wireless remote.
When used in this manner,
the MiniPort is switched on
or off when the outlet that
the PS-REL is plugged into
goes on or off.

## OPTIONAL REMOTE LED INDICATOR

The MiniPort terminal labeled STATUS is an output that may be used to illuminate an LED at a remote location to indicate that power is available at the MiniPort's outlets. If it is

HIGH (+12V relative to the GND terminal), the unit is ON; if LOW, the unit is OFF. Simply connect the indicator LED between STATUS and GND (do not use a series resistor). If multiple units are used, a separate LED must be used to indicate the status of each. Do not connect the STATUS terminals of multiple units together.

#### **KNOCKOUT HOLES**

All four sides of the MiniPort-30 enclosure have multiple knockouts to accommodate every installation, with 3/4" conduit – one on the top surface, the other on the bottom. According to the National Electrical Code, 3/4" conduit can accommodate up to five 20 amp circuits using ten THWN 12 gauge stranded wires; however, local codes should be checked for exact requirements. For grounding and other details, please consult a licensed electrician.

#### THREE YEAR LIMITED WARRANTY

The Furman MP-30 is protected by a limited three year warranty, covering defects in materials and workmanship, provided that the registration card is filled out and returned by the customer. Otherwise, a one year warranty applies. Products must have a proof of purchase from a Furman authorized dealer. During this period, Furman will make any necessary repairs without charge for parts or labor. Shipping charges to the factory or repair station must be prepaid by the owner; return-shipping charges (via UPS Ground) will be paid by Furman. This warranty applies only to the original owner and is not transferable. Also, it does not apply to repairs done other than by the Furman factory or Authorized Repair Stations.

This warranty may be cancelled by Furman at its sole discretion if the MP-30 unit has been subjected to physical abuse or has been modified in any way without written authorization from Furman. Furman's liability under the warranty is limited to repair or replacement of the defective unit. Furman will not be responsible for incidental or consequential damages resulting from the use or misuse of its products. Some states do not allow the exclusion of incidental or consequential damages, so the above limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Warranty claims should be accompanied by a copy of the original purchase invoice showing the purchase date (if a Warranty Registration Card was mailed in at the time of purchase, this is not necessary). Before returning any equipment for repair, please read the important information on service, which follows. NOTE: In the interest of continuous product improvement, product specifications and installation requirements are subject to change without notice.

#### **SERVICE**

Before returning any equipment for repair, please be sure that it is adequately packed and cushioned against damage in shipment, and that it is insured. We suggest that you

save the original packaging and use it to ship the product for servicing. Also, please enclose a note giving your name, address, phone number and a description of the problem.

NOTE: All equipment being returned for repair must have a Return Authorization (R/A) Number. To get an R/A Number, please call the Furman Service Department, (707) 763-1010 ext. 120 or 121, between 8 a.m. and 5 p.m., U.S. Pacific Time. Please display your R/A Number prominently on the front of all packages.

#### **Dimensions**

The MiniPort-30's body dimensions are: 8" H x 8" W x 4"D. The baseplate is 8" square.

#### Connectors

Input: NEMA L-1430 male. Output: NEMA L14-30 female

#### Other MiniPort Models Available

The MiniPort-20 Power Relay is a C-NRTL listed, 20 amp, relay switched 120 VAC outlet with a terminal strip that allows remote control via safe, inexpensive, low voltage Class 2 wiring.

Also available is the Furman MiniPort-15 which is similar in appearance, and functionally identical except for its 15 amp rating. Both models include an internal 12 VDC supply, and can be controlled from a remote location with maintained or momentary contact switches. The MP-15 comes equipped with one knockout hole for permanent installation with 1/2" conduit, while the MP-20 has two knockout holes — one on the top surface and one on the bottom. Use of the bottom knockout hole requires removing the AC cord. According to the National Electrical Code, 1/2" conduit can accommodate up to five 20 amp circuits using ten THWN 12 gauge stranded wires; however, local codes should be checked for exact requirements.

The MiniPort-15 is fused; the MiniPort-20 is equipped with a precision magnetic circuit breaker. Both are housed in rugged steel enclosures and come equipped with a heavy duty, 10 foot AC cord. The MiniPort-15 and MiniPort-20 are C-NRTL listed. Note: Because of its C-NRTL listing, the MiniPort-20 used a 20 amp AC plug with perpendicular (not parallel) blades. If in doubt regarding your installation, please consult an electrician or call the factory.

#### Dimensions:

5.5" (H) x 3.75" (W) x 2" (D). With a mounting bracket, width is 5.25".



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